Non-financial Performance Ratios as a Management Tool

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This paper argues that annual financial statements do not provide a true picture of a company's operations in the past. Accounting data, on the basis of which financial statements are drawn up, cannot be seen as a suitable source of accounting information for making decisions about the future. In addition, this means that the financial ratios based on such sources are not sufficient to satisfy the information needs of the users. As a consequence, an increased number of non-financial ratios or ratio systems are being developed. While non-financial ratios can be seen as completing the financial ones, they certainly cannot replace them. This important restriction of using non-financial ratios is often neglected.

INTRODUCTION

Accounting is a process of recording and studying financial data related to a company's operations. Its aims are above all:

- to provide information about the events in company business life in an agreed language comprehensible to accounting information users, and
- to provide information which is vital to business decision making.

The first aim of accounting relates to the past, the second to the future. If we consider reaching the above mentioned aims in theory, we can establish that it is not easy to reach them. Accounting is not an exact science, which means that approximations or planned amounts are very often used as its tool. In addition, as the future is uncertain, we cannot determine the exact value an asset is about to achieve when converted into monetary form, nor we can define the amount which will be required to discharge a certain liability.

In practice, the problem is even more serious. According to recent American studies in this field, the average ratio between the book and market values of companies is 1 : 6.5 and is even higher in companies with high added value per employee, which can be as high as 1 : 30.

Obviously, we should ask ourselves if companies' annual financial statements show a true picture of companies' past operations. Moreover, another question should be raised: Is it possible to provide appropriate accounting information for making decisions about the future on the basis of such accounting data?

Both answers are negative. Information provided by accounting (i. e. 'traditional' accounting) does not show a true picture of a business' operations in the past, neither does it form an appropriate basis for decision making in the company about its future. In other words: financial ratios based on traditional accounting data can no longer meet information needs, above all, the information needs of the internal users of accounting information.[1]

The problem can be solved in two ways.

The first option is to reshape the philosophy of accounting practices. This includes the change of generally accepted accounting principles and approaches to valuing balance sheet categories. This option faces two serious obstacles:

1. Conservatism, which has always been a significant feature of accounting practice: accountants have never been very innovative; moreover, they tend to resist change quite irrationally; consequently, carefully verified approaches have always been used in accounting; a serious disadvantage is slow adaptation of the accounting profession to the rapidly changing circumstances in companies' operations.
2. Objective difficulties in accounting of intangible long-term assets: the present value of future services (economic benefits) which will be provided for its owners by these assets, can be difficult to establish; there are various views concerning the value of employees and their abilities and how these values appear – or do not appear – in a company's financial statements.

The second option, in traditional accounting, is to explain financial ratios in a non-financial, i. e. descriptive way.

There is a question of the suitability of the above mentioned options. The professional community tends to consider applying the second option, which results in an increasing number of non-financial performance ratios or non-financial ratio systems. Nevertheless, is it possible to replace financial performance ratios by non-financial? Can we use non-financial performance ratios where financial ratios are not applicable?

Interestingly, non-financial performance ratios are mostly not in the domain of accountants. It is entrepreneurial economists in the field of management who develop and promote these ratios.[2] They are increasingly aware of the ineffectiveness of traditional accounting information about the past and its uselessness when taking decisions about the future. The accounting profession does not respond to the challenges of modern entrepreneurialship, therefore, the job is mainly done by non-accountants.

In the further text, performance ratios, including non-financial performance ratios, will be defined. We will also consider the need for developing non-financial performance ratios. This will be followed by considering their advantages and disadvantages, and final findings.

PERFORMANCE RATIOS DEFINED

Performance ratios can be defined in a narrow or broad sense. In a broad sense, they include absolute and relative figures, in a narrow sense, they include only relative figures. An absolute figure can be a particular figure (e. g. price), difference (e. g. operating result) or mean value (e. g. the average amount of receivables) while relative figures are: participation rate, index and coefficient. In this article, a broad definition of performance ratios was applied.

Performance ratios can be subdivided into financial and non-financial.[3] By using financial ratios, we compare value-expressed amounts, while non-financial ratios are descriptive. Financial ratios can be expressed as absolute and relative figures, on the other hand, non-financial ratios are expressed as absolute (e. g. customer satisfaction) or relative (e. g. the number of complaints per 1000 products sold). These ratios are presented in figure 1.

THE NEED FOR DEVELOPING NON-FINANCIAL PERFORMANCE RATIOS

In the accounting community, there is a common belief that employees cannot be considered as company assets. The same is true for investment in people (human capital), implementing new approaches (in terms of accounting, we can refer to target costing, activity-based costing of a

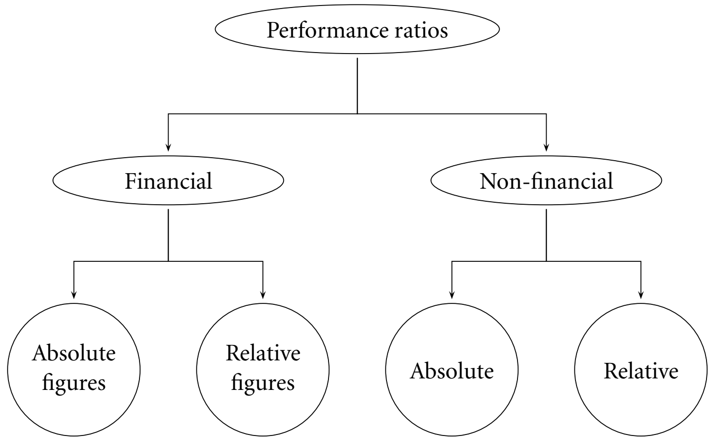

Figure 1: Performance ratios

business process, and the like), investment in reorganization, etc. Nevertheless, the increasing by unbalaced relationships between the book value and the actual market value of companies indicate that companies actually have large asset values at their disposal, which are not stated in a 'traditional' balance sheet. Understated assets also affect the operating result of a company.

Moreover, it is not only annual financial statements which do not provide a clear picture of a company's financial position; the same is true for the values of financial performance ratios, which are based on the data provided in the above mentioned annual financial statements.

The professional community has responded to this fact in a quite genuine and interesting way. This has resulted in developing numerous non-financial performance ratios or even integrated ratio systems. They are to meet the needs of users, who are becoming increasingly dissatisfied with accounting information. In other words, traditional financial statements provide a very poor picture of a company's operations in the past. Moreover, accounting information does not provide their users (management) with an appropriate source as a starting point for their business decisions. Therefore, we should find out if non-financial performance ratios provide all the information which cannot be provided by financial performance ratios. Can they simply replace financial performance ratios or in other words, is their applied value limited? We believe that this is closely related to asset definition and asset value.

There are various asset definitions in the professional literature; nevertheless, what we can establish from these definitions is that an asset has the following characteristics:

- it is controlled by the entity,
- it is a scarce resource,
- possessing assets may be associated with creating economic benefits,
- its cost of acquisition can be measured with certainty and exactness.

Asset value can be defined as the present value of future services (economic benefits) provided by the asset to its owner in the whole period of its usefulness.

We have already mentioned that it is non-financial performance ratios that are expressed descriptively. They were designed to explain, in a non-financial way, certain relationships which are not satisfactorily explained in terms of finance (referring to value) in traditional accounting.

Theoretically, it is possible for non-financial performance ratios to replace financial ones, which is only possible on condition that the relationships among particular occurrences included in financial performance ratios or their absolute values can with certainty state the present value of economic benefits which are to be gained in the future. Such relationships can be treated as company assets. Unless non-financial ratios have this feature, their information power is limited. In terms of information gap filling created by financial performance ratios, such ratios are useless.

The users of non-financial performance ratios do not include the relationships among individual occurrences (which are included in these ratios or their absolute values) in company assets. Therefore, we can conclude they are not aware of the present value of a company's future economic benefits, which leads to two essential findings:

1. The applied value of non-financial performance ratios is limited, and obviously falls short of our expectations and it often does not justify the investments connected with developing these ratios and their practical usage.
2. Applying non-financial performance ratios as a means of explaining unbalanced relationships between book values and market values of companies, or as a means of information design for business decision making about future, is a poor choice.

ADVANTAGES AND DISADVANTAGES OF NON-FINANCIAL PERFORMANCE RATIOS

Although designing non-financial ratios of performance is useful, their application faces some limitations. Nevertheless, there are both advantages and disadvantages to it.

Their first advantage is explaining or trying to explain certain relationships or occurrences which are not evident from financial statements. For instance, from financial statements (or accounting information in general) we cannot read about the company's coexistence with the local community and wider environment, about the company's technological development, employee satisfaction, health and safety at work, etc. There is also not much information on competitive advantages and company's weaknesses, its market share, customer satisfaction, new products, quality control expenses, branch development and the like. Financial statements do not show the value of investment in employees, nor do they show their knowledge and skills. Non-financial ratios of performance provide information on events referring to essential aspects of the company's performance.

The second advantage of non-financial performance ratios is the fact they reveal a deep crisis in traditional accounting, which does not respond to the challenges and changes of companies' operations. The traditional accounting played a purposeful role especially during the period of early capitalism when the two most important factors of production were material and work (in the sense of using the physical potential of employees). By a rapid increase in the share of knowledge included in the prices of business effects and by a sharp increase in the share of intangible long-term assets in the company's asset structure, the value of accounting information is decreasing.[4]

Developing non-financial performance ratios involves some disadvantages. Let us focus on the major ones.

The first disadvantage of non-financial performance ratios has already been mentioned in the previous section. It refers to the fact that these ratios cannot reflect the present value of future services or economic benefits for the company, resulting from the absolute value of a ratio or relation. The usefulness of such ratios is thus limited. Moreover, non-financial performance ratios are too often used to record occurrences (relations) which should be shown among assets if they are to gain future economic benefits. Non-financial performance ratios can be a useful complement to financial ones, above all when they indicate the present value of future economic benefits (services) for the company.

The second disadvantage is their inability to affect (at least not directly) a company's assets and financial position as well as its performance, which might all be the result of the value of some non-financial performance ratios (customer and supplier satisfaction, the number of complaints, etc.). In general, non-financial performance ratios only explain these factors. For instance, company performance thus depends on its market share and customer satisfaction. Nevertheless, it is much more affected by the approaches selected to evaluate particular economic categories. A non-financial performance ratio, which reflects customer satisfaction, only explains the achieved sales revenue, which is ascertained financially. Higher values of most non-financial performance ratios do not necessarily mean enhancing company performance, taxation, and similar.

Their third disadvantage is the fact that they are used in external financial reporting. Their applicability is therein limited due to the fact that they cannot be verified by external auditors, and their credibility cannot be easily verified when considering numerous ratios.

The fourth disadvantage of non-financial performance ratios is their 'connivance' to accounting professionals who, in turn, do not tackle the problem in an appropriate way. Moreover, these ratios are often used to explain the difference between the companies' book values and their much higher market values. To sum up, the mentioned fact reflects a serious crisis in the accounting profession.

CONCLUSION

The last decade has witnessesed the development of non-financial performance ratios or ratio systems. These ratios are an important complement to the financial ones. Nevertheless, their development and subsequently their application face a serious problem: they are overused, i. e. too much significance is ascribed to them.

Although non-financial performance ratios are an important complement to the financial ones, they cannot replace them. From the relation expressed in a non-financial performance ratio or its absolute value we cannot ascertain the present value of a company's future economic benefits. Moreover, this means that non-financial performance ratios cannot provide a satisfactory explanation for unbalanced relationships between a company's book value and its market value, nor do they provide information required for business decision making about the future.

NOTES

1. Financial statements, as well as financial performance ratios based on these statements, generally show only 15 percent of a company's past events. This percentage relates to the United States, while the percentage for Slovenia is much higher. Therefore, we should consider the benefits of such an information system for management. Are these benefits comparable with the increasing costs (staff salaries, training, information technology and the like) of business operating? Is thus accounting, as it used to be in the past, mainly in the service of external users?
2. There are several non-financial performance ratio systems. For instance: the Navigator which was developed in a Swedish insurance company Skandia (The Danish Trade and Industry Development Council 1998), and *Balanced Scorecard* by Kaplan and Norton (2000).
3. According to the Dictionary of Accounting, Finance and Auditing, financial ratios are ratios used in decision making in the field of finance (Turk 2000, 163). Our definition of financial ratios is thus wider. The dictionary does not define the conception of non-financial ratios.
4. David Wilson, a certified accountant and partner with Ernst & Young, which is among the five biggest consulting and auditing companies, comments (Stewart 1997, 58): 'It has been five hundred years since Paccioli published his seminal work on accounting and we have seen virtually no innovation in the practice of accounting – just more rules – none of which has changed the framework of measurement.'

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